

Request for Proposals, 2001-2
Joint Fire Science Program

U.S. Department of the Interior

Bureau of Indian Affairs
Bureau of Land Management
National Park Service
U.S. Fish and Wildlife Service
U.S. Geological Survey

U.S. Department of Agriculture

Forest Service

Opens February 22, 2001

(This RFP will remain open until further notice. Proposals will be accepted continuously but acted on twice each year - April 23 and October 15, 2001. That is, proposals in hand on April 23, 2001 will be peer reviewed for Joint Fire Science Program Governing Board action in June, 2001.)

Includes one Task Statement on “rapid response” projects.

Request for Proposals

by the
Joint Fire Science Program

A. Program Description

The Joint Fire Science Program (JFSP) is a partnership of six federal wildland management and research agencies with a need to address problems associated with accumulating wildland fuels (combustible material, generally living and dead plant materials) on lands administered by the partners. The partners include the USDA Forest Service and five bureaus in the Department of the Interior (Bureau of Indian Affairs, Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service, and the U.S. Geological Survey). For the purposes of this Request for Proposals (RFP), "wildlands" are considered to be forests and woodlands, shrublands, grasslands, and associated wetlands and riparian areas.

Wildland fuels have been accumulating during at least the past half century due to wildland fire management policies, wildland management practices, and other factors. As demonstrated in the wildland fires of 2000, the additional fuels contribute to intense fire behavior and increase the resistance of fires to control. Consequently, property and natural resources have been destroyed, costs of fire management have escalated, fire dependent ecosystems have deteriorated, and the risks to human life remain high.

The Congress, agency administrators, JFSP partners, and others have recognized that the accumulation of wildland fuels must be reduced in order to reduce the human threat from fire and maintain natural resource values. Congress directed the Department of the Interior and the USDA Forest Service to develop a Joint Fire Science Plan to provide science-based support to land management agencies as they address this need. The JFSP was established with the 1998 Appropriation for Interior and Related Agencies to help ensure that cooperating Federal land management agencies expedite scientifically sound, efficient, systematic, and effective solutions and monitoring programs that cross agency jurisdictions and fuel types.

The 1998 Joint Fire Science Plan addressed four issues (Principal Purposes) critical to the success of the fuels management and fire use programs. These included wildland fuels inventory and mapping, evaluation of fuels treatments, scheduling of fuels treatments, and monitoring and evaluation. The Congress included additional direction in the 2001 Appropriation for Interior and Related Agencies. In addition to the four original Principal Purposes, the JFSP was directed to focus attention on such issues as protocols for evaluating post fire stabilization and rehabilitation projects, aircraft based remote sensing, and regional/local issues.

For further background on the goals of the JFSP, those considering submitting proposals and other interested parties are encouraged to review the Joint Fire Science Plan which is available via the Internet at: http://www.nifc.gov/joint_fire_sci/jointfiresci.html. In addition, the JFSP issued RFPs in June 1998, February 1999, and February 2000, and subsequently selected and funded over 70 projects. Previous RFPs and lists of the funded projects can also be found at the web site.

This RFP contains one Task Statement for which proposals are solicited. The JFSP encourages proposals from all interested parties. However, because the focus of the JFSP is on wildland fire and fuels issues on Federal wildlands, evidence of the cooperation of a Federal cooperator must be included in all proposals.

That is, non-Federal proposers are asked to ensure that a Federal cooperator participates in development and submission of proposals.

This RFP will remain open until further notice, and proposals will be accepted continuously. However, proposals will only be peer reviewed and prepared for Governing Board action twice each year. That is, proposals submitted in response to this RFP that are received on or before April 23, 2001 will be peer reviewed and prepared for Board action in June, 2001. The Federal cooperator is also the direct recipient of funding. Proposals received after April 23, 2001 will be held for peer review and Board action after October 15, 2001. Questions should be directed, and proposals forwarded to:

Dr. Bob Clark
Program Manager
Joint Fire Science Program
National Interagency Fire Center
3833 S. Development Ave.
Boise ID 83705
phone (208) 387-5349
facsimile (208) 387-5960

Electronic submissions of proposals are acceptable provided they are followed by a hard copy of the title/signature page with original signature(s). The proposal and signature page must be received by April 23, 2001. Please e-mail electronic proposals, in Wordperfect, Microsoft Word, or Rich Text Format, to Bob_Clark@nifc.blm.gov.

Finally, the JFSP conducts annual workshops for Principal Investigators (PIs) from each active project. Proposals submitted in response to this RFP should include travel and related funding needed for at least one PI to participate in the annual workshop.

B. Area of Interest for Proposals

This RFP contains one Task Statement. The RFP will remain open until further notice. However, peer reviews and Governing Board action will occur twice each year (April 23 and October 15, 2001). That is, complete proposals in hand on April 23, 2001 will be peer reviewed and submitted for Board action in June, 2001. Proposals received after April 23, 2001 will be held until the October 15, 2001 review. Proposers responding to this RFP should note that specific requirements must be met in order to visit or work on uncontrolled wildland fires.

Task 1: *Obtain, document, and evaluate critical, time-sensitive information or data during or following wildland fire incidents or post fire land treatments. Proposals should focus on fire behavior, immediate post-fire effects including fuels reduction, post fire stabilization or rehabilitation, the effects of previous land management activities on fire behavior and severity, as well as similar issues. Proposals should also address wildland/urban interface areas and issues as appropriate. Organized response teams are required.*

NOTE: All Federal wildland management agencies have mandatory requirements for visiting or working on uncontrolled wildland fires. The requirements may include certain physical fitness requirements, training, and Personal Protective Equipment (PPE). The affected Incident Management Team (IMT) and the responsible Federal, State, Tribal, or local agency administrator must approve fireline visits. Proposals that include visiting or working on uncontrolled wildland fires must address these issues to be considered for funding.

Certain types of information or data that are essential to our understanding of wildland fire incidents and/or post fire stabilization and rehabilitation activities can only be obtained during or immediately after a fire. For example, estimates of flame length or fire spread are more precise and reliable if measured *in situ* rather than inferred from general documentation, poorly validated models, or indirect methods such as stem char heights. Similarly, certain ecological impacts such as water-borne erosion, sedimentation, and changes in stream chemistry occur within days to weeks after a fire. Also, following containment or control of most wildland fire incidents, stabilization measures are taken immediately and many incidents are followed by detailed rehabilitation plans and rehabilitation actions. Although routine monitoring may occur, rigorous scientific investigation occurs only infrequently. Installation of well designed comparisons of post fire treatments requires close coordination with Burned Area Emergency Rehabilitation (BAER) Teams and local managers, often before a fire is controlled. All of these situations have in common the need for a rapid, well organized, and preplanned response from the science community. In the past, this type of work has often been hampered by lack of funding and by lack of adequate pre-incident planning.

To meet this need, the Governing Board envisions development of small rapid deployment teams of research scientists and technical specialists that can mobilize quickly to investigate and document various aspects of fire behavior or fire effects on uncontrolled wildland fire incidents, teams that can deploy quickly to investigate and document first order fire effects, and/or teams that can evaluate site stabilization or rehabilitation treatments or issues associated with stabilization or rehabilitation (such as edaphic or hydrologic components). Proposals must clearly describe data needs and research objectives and experimental design, and must identify the types of fire incidents and site conditions required. Proposals must identify clear criteria for selection of fire incidents and study sites that reflect the needs of the particular

study. The Board believes that deployment and actions by these teams would be greatly enhanced if at least one team member was qualified at the Strike Team/Task Force Leader level or higher. With respect to post fire treatments, the research teams would be expected to operate in conjunction with Burned Area Emergency Rehabilitation (BAER) Teams or other efforts to stabilize or rehabilitate burned areas. Also, proposers should note that the JFSP Governing Board may specifically request that successful proposers visit certain incidents which the Board believes has specific value to the goals and objectives of the projects funded under this Task Statement.

Accepted and funded proposals would, following selection and award, remain in effect for two years from date of approval. Funding will be made available upon approval of the project to enable planning activities and purchasing necessary equipment and supplies in preparation for initiation of field studies. Principal Investigators (PIs) of approved projects would need only to obtain verbal concurrence to initiate field work following onset of the incident(s). Initial funding will be limited to a maximum of \$100,000.00. It is expected that scientists' salaries would be contributed to the project unless approved in advance by the Governing Board. Approval of proposals will not constitute agreement to fund addition work on the same project. However, projects which clearly fit into the Joint Fire Science Plan or Implementation Plan may be asked to develop longer range proposals after-the-fact; such projects may be funded competitively or non-competitively, in whole or in part, at the discretion of the Joint Fire Science Program Governing Board.

C. Format for Proposals

Overview of the Proposal Format

The full proposal should specify rationale, objectives, methodologies, and deliverables in sufficient detail to allow an informed peer to assess the proposal's validity in addressing the Task Statement in the Request for Proposals (RFP). The proposal should also identify criteria by which success of the project will be determined. The proposal text and accompanying tables and figures should be limited to 12 pages (not including detailed budget documentation, curriculum vitae, and similar information). Complete annual and total budgets and a firm timeline for deliverables must be included, as well as a mechanism for "technology transfer" to appropriate end users. The proposal also provides a record of management responsibility and accountability for various aspects of the project.

Title Page

The following format should be used for the title page (not to exceed 1 page):

Project Title:

Principal Investigator(s):

Affiliation:

Address:

Telephone/Facsimile Number(s):

E-mail:

Duration of Project:

Annual Funding Requested from the Joint Fire Science Program: \$ _____

Total Funding Requested from the Joint Fire Science Program: \$ _____

Total Value of In-Kind or Financial Contributions: \$ _____

Abstract: Summarize the proposed project in a brief abstract not to exceed ½ page. The abstract should include the justification for the proposed project in relation to one or more task statements in the Request for Proposals, objectives, appropriate methodology, and applicability of results.

E-mail or facsimile proposals are acceptable provided that the e-mail or facsimile transmission is followed by a hard copy of the title page with original signature(s). If hard copy is provided only 1 copy is necessary.

Introduction

An introductory section should include:

- 1) Project Justification. A summary of the issue(s), why the project needs to be done (relevance to task statements in the Request for Proposals), and benefits derived.
- 2) Project Objectives. A statement of the project objective(s) must be clearly stated and measurable. This should include a brief statement of the hypothesis to be tested (if applicable), what information or product(s) will be provided at the end of the project, and how the information or product can be used to resolve the issue(s) stated in the task statement(s).
- 3) Background. This section includes a concise review and synthesis of existing knowledge and previous

research or other pertinent background information in the project task area.

The introductory section is intended to provide peer reviewers and the Governing Board with evidence that the proposed work compliments previous and on-going work and that the work is applicable to task statements in the Request for Proposals. Although the literature may be extensive, the synthesis should generally include reference to no more than about 15-20 of the most important and/or most relevant sources.

Materials and Methods

This section should describe procedures proposed for conducting the project in sufficient detail that a knowledgeable reviewer could understand the process and that a peer could replicate the project. A brief description of the study sites (as applicable) should be included.

Project Duration

Proposals will generally not be funded for longer than three years although requests for extensions or additional work may be considered.

Budget

The proposed budget should be provided in sufficient detail to identify indirect costs and related surcharges, to separate labor costs from operational costs, and to identify salaries associated with funded scientists. Annual costs should be provided. Separate line items for "capitalized" equipment should be included. Outyear projections should be included for multi-year proposals. Proposed budgets should include travel expenses for at least one Principal Investigator (PI) to participate in an annual 2-3 day PI workshop.

Deliverables

Provide specific details on the information or product(s) that would be provided by the proposed project, and realistic time tables for delivery dates. It is expected that all final products will include an electronic version suitable for distribution, posting, etc. Descriptions in English units, with metric equivalents in parenthesis, are required. Annual progress reports are required. Also, the JFSP Governing Board believes that some "rapid response" findings may be so important that immediate notification is prudent; in these cases, the Governing Board would request immediate preliminary reports, suitable for posting or sharing with appropriate land management officials.

Technology Transfer

It is imperative that information or products reach field managers in a useful form. Therefore, each proposal should include a description of how the "technology" would be transferred to the field. Also, proposers are strongly encouraged to use Internet websites to post information regarding funded projects.

Qualifications of Investigators

Include Curriculum Vitae for principal investigator(s) and at least 1 major collaborator. These should reflect recent, relevant experience and publication(s) and should not exceed 2 pages.

Checklist for Proposal Submissions

Does the proposal:

- * include an introduction or background section that includes the specific objectives of the project and describes how the proposed work is relevant to one or more task statements in the RFP?
- * include a list of cooperators and their proposed contribution, including the original signature of the principal investigator and an authorized signature from a cooperating federal unit (See Proposal Format, Title Page)?
- * include a relevant Curriculum Vitae of the Principal Investigator(s) which demonstrates ability to complete the proposed work?
- * include a review and synthesis of related past and current literature and work?
- * include an adequate description of the specific location of the proposed work?
- * include a description of the materials and methods of the proposed work including (as appropriate) experimental design and statistical analysis(es)?
- * include a detailed annual and total budget, including identification of salaries and indirect costs?
- * include a "Justification of Need for Salary Support," approved by appropriate authority, if needed? (See Salary Policy Section)
- * include a description and cost of equipment which needs to be purchased to support the work?
- * include a list of deliverables with proposed dates of delivery?
- * include a technology transfer mechanism?

D. Review and Evaluation of Proposals

The following factors will be considered in reviews and evaluations of proposals to the Joint Fire Science Program:

1. How well does the proposal address one or more specific task statements identified in the RFP?
2. Does the proposal follow the requested format and include all the requested information?
3. Will the proposed work provide information or products that are useful across agency jurisdictions, fuel types, and geographic areas?
4. Does the proposal provide for adequate transfer of information or products, consider general availability and usefulness of proposed technology, and, as appropriate, provide for a feedback mechanism to the study team for product testing and improvement?
5. Does the proposal provide for adequate collaboration among agencies, between fire and land management personnel and research scientists or other collaborators, and between disciplines to ensure broad integration of existing knowledge and approaches as well as applicability of results and recommendations?
6. Are study approaches or design and statistical analysis(es) appropriate and adequate to meet stated objectives?

7. What are the qualifications of the team to do the proposed work? Are adequate institutional resources and support available?
8. Are proposed timeframes and budget reasonable and adequately justified, including budgets for proposed sub-agreements?
9. If formal cooperative arrangements are proposed (e.g., with universities or other non-federal organizations), is there evidence that these will be feasible and agreeable to the cooperators?

E. Indirect Costs and Salary Policy

Indirect Costs

The JFSP recognizes the need of participating organizations to recover reasonable indirect costs. Indirect costs up to 15 percent (for the unit performing the work) may be included in proposals without detailed justifications, however, any indirect costs exceeding 15 percent must be justified. Similarly, indirect costs in excess of 10 percent on pass-through arrangements from federal units to cooperating federal or non-federal units must be justified. The Governing Board of the JFSP reserves the right to negotiate budget amounts and deliverables (including indirect costs over 15 percent) with proposing organizations.

Salary Policy

Normally, salaries of permanent full-time federal employees are expected to be provided by their agencies. This is also true of university faculty on 12-month tenure-track appointments. These employees are already fully funded by their institutions. However, the Governing Board recognizes that there can be mitigating circumstances arising from the need to fill in behind these employees when they are reassigned to JFSP funded activities, or due to policies of individual organizations. In such cases, the JFSP may agree to fund salaries of permanent employees. A brief justification must be included in the proposal, and the justification must be certified by an appropriate institutional authority, other than the Principal Investigator or other cooperator on the proposal, at the employee’s organization or institution. The format provided below should be used for the certification. In addition, permanent employee salary costs must be explicitly identified in the project budget. The JFSP requires no special justification (other than a brief description of the need for the position in the budget justification section of the proposal) for funding temporary or term employees, post-doctoral employees, or graduate or undergraduate students.

**Certification to the Joint Fire Science Program
Justification of Need for Salary Support**

I hereby certify the attached Justification of Need to provide temporary salaries for full-time permanent employee (s)_____ (*list name of employee(s)*) is necessary and appropriate to enable him/her (them) to fully and directly participate in the proposed project.

I understand that salary funding for this/these employee(s) directly involved in the proposed project is temporary and will not be provided beyond the duration of the proposed project.

Signature_____

Date_____

Title _____